1.0 Introduction

1.1 Project Purpose

In December 2006, the City of Greenville commissioned Greenways Incorporated and Arbor Engineering to prepare a Trails and Greenways Master Plan. The purpose of this plan is to develop a framework for building an integrated system of pathways that will link residents to the outdoors. The future network will provide residents with close-to-home and close-to-work access to bicycle and pedestrian trails that connect to the City's most popular destinations. The trails and greenways will serve transportation and recreation needs and help to encourage quality, sustainable economic growth. Building upon existing planning efforts and existing facilities, this Master Plan contains detailed trail corridor recommendations and guidelines, which together form this comprehensive network.

1.2 The Planning Process

The planning process started with the collection and analysis of existing plans and Geographic Information Systems (GIS) data. A kick-off meeting between city staff and the project consultants established the initial work plan, which consisted of identifying major opportunities and constraints for trails and greenways throughout the City. Next, draft recommendations were presented to the public for review, including opportunities for residents to speak directly with City staff and project consultants about any concerns, comments, or ideas for the plan. In addition to comments received during the public workshop, public input was also collected through an online survey, which gathered specific information related to trail use in the City of Greenville.



Reedy Falls & Liberty Bridge: the signature features of Greenville's existing trail system.

The Bicycle and Pedestrian Advisory Committee also reviewed the Plan's recommendations and helped determine how the Plan could best serve the interests of the City as a whole. Final presentations concluded the effort with recommendations to officially adopt the Plan.

1.3 Benefits of Trails

Trails and greenways provide a variety of benefits that will ultimately affect the sustainability of the City of Greenville's economic, environmental, and social health. These benefits include:

- Creating Value and Generating Economic Activity
- Bicycle and Pedestrian Transportation
- Improving Health through Active Living Clear Skies, Clean Rivers, and Protected Wildlife Protecting People and Property from Flood Damage
- Enhancing Cultural Awareness and Community Identity

Trails and Greenways Increase Real Property Values

Numerous studies have made the positive link between trails and their benefits abundantly clear. The degree to which a particular type of benefit is realized depends largely upon the nature of the greenway and trail system being implemented. Although the City of Greenville Comprehensive Trails Plan is primarily focused on trails for recreation and transportation, many conservation-related benefits still apply. The sections below describe how trails and greenways create these opportunities in general, while offering some examples of how each benefit could be realized in Greenville. A list of resources is provided at the end of the chapter for more information.

A fully developed trail network will bring economic benefits to the

City of Greenville, including raising real property values and in-

There are many examples, both nationally and locally, that affirm

the positive connection between greenspace and property values (1).

Creating Value and Generating Economic Activity

creasing tourism and recreation-related revenues.

added \$5,000 to the price of 40 homes adjacent to the regional greenway – and those homes were still the first to sell (3).

- Front Royal, VA: A developer who donated a 50-foot-

wide, seven-mile-long easement along a popular trail sold all

50 parcels bordering the trail in only four months.

- Apex, NC: The Shepard's Vinevard housing development

- Salem, OR: land adjacent to a greenbelt was found to be worth about \$1,200 an acre more than land only 1000 feet away.
- Oakland, CA: A three-mile greenbelt around Lake Merritt, near the city center, was found to add \$41 million to surrounding property values.
- Seattle, WA: Homes bordering the 12-mile Burke-Gilman trail sold for 6 percent more than other houses of comparable size.
- Brown County, WI: Lots adjacent to the Mountain Bay Trail sold faster for an average of 9 percent more than similar property not located next to the trail.
- Dayton, OH: Five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that openspace.

Residential properties will realize a greater gain in value the closer they are located to trails and greenspace. According to a 2002 survey of recent home buyers by the National Association of Home Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices (2). Additionally, the study found that 'trail availability' outranked 16 other options including security, ball fields, golf courses, parks, and access to shopping or business centers. Findings from the

Trust for Public Land's Economic Benefits of Parks and Open Space, and the Rails-to-Trails Conservancy's Economic Benefits of Trails and Greenways (listed in the right-hand column) illustrate how this value is realized in property value across the country.

These examples show how valuable greenways can be as an amenity to nearby residents. Next, some quotes from experts in the field of real estate development reflect similar findings:

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"Homes that front on significant greenway space are easier to sell and do often generate premiums of 5% or more than comparable homes internal to the neighborhood." (Bill Gartland, Vice President, Crosland, 2006 - Crosland is one of the Southeast's leading diversified real estate companies)

"Almost every high end development of note that I have seen is pushing some form of nature trails or natural preserve, which is a huge change from the old way of doing things...I think it is hard to quantify the economics of greenways/nature preserves, except that people seem to want them. We may be coming to a point where people expect them in communities, especially over a certain price point." (Maggie Collister, 2006 - Collister coordinates market research and maintains an extensive competitive market database for The Littlejohn Group, a real estate analysis firm with wide-ranging experience throughout the Southeast)

Also, from the nearby Charlotte region:

"There clearly is a substantial jump in property values as a result of the implementation of this greenway program...so much so that almost every elected official has claimed some degree of credit for its development." (Tommy Norman, President, NORCOM Development, 2006 – Referring to greenway development in the Greater Charlotte Area)

Trail Tourism Creates Economic Impacts

Tourism and recreation-related revenues from trails and greenways come in several forms. Trails and greenways create opportunities in construction and maintenance, recreation rentals (such as bicycles, kayaks, and canoes), recreation services (such as shuttle buses and guided tours), historic preservation, restaurants and lodging. Tourism is currently ranked the number one economic force in the world.

- The Outer Banks, NC: Bicycling is estimated to have an annual economic impact of \$60 million and 1,407 jobs supported from the 40,800 visitors for whom bicycling was an important reason for choosing to vacation in the area. The annual return on bicycle facility development in the Outer Banks is approximately nine times higher than the initial investment (4).
- Damascus, VA: At the Virginia Creeper Trail, a 34-mile trail in southwestern Virginia, locals and non-locals spend approximately \$2.5 million annually related to their recreation visits. Of this amount, non-local visitors spend about \$1.2 million directly in the Washington and Grayson County economies (5).
- Morgantown, WV: The 45-mile Mon River trail system is credited by the Convention and Visitors Bureau for revitalizing an entire district of the city, with a reported \$200 million in private investment as a direct result of the trail (6).



Trail users support local businesses, such as this cafe in Downtown Greenville.

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- Tallahassee, FL: The Florida Department of Environmental Protection Office of Greenways & Trails estimate an economic benefit of \$2.2 million annually from the 16-mile St. Marks Trail (8).
- San Antonio, TX: Riverwalk Park, created for \$425,000, has surpassed the Alamo as the most popular attraction for the city's \$3.5-billion tourism industry (7).
- Pittsburgh, PA: Mayor Tom Murphy credits trail construction for contributing significantly to a dramatic downtown revitalization.
- Allegheny Passage, PA: The direct economic impact of the trail exceeded \$14 million a year, encouraging the development of several new businesses and a rise in property values in the first trailhead town.
- Leadville, CO: In the months following the opening of the Mineral Belt Trail, the city reported a 19 percent increase in sales tax revenues.
- Dallas, TX: The 20-mile Mineral Wells to Weatherford Trail attracts 300,000 people annually and generates local revenues of \$2 million.

Some of the trail examples above feature unparalleled natural landscapes that contribute to the impressive figures they generate. Greenville's trail network will feature many unique landscapes that rival these examples, in some cases surpassing them. The City of Greenville should aim to attract similar economic benefits as those noted above, especially considering that Falls Park at the Reedy River is already so successful.

Bicycle and Pedestrian Transportation

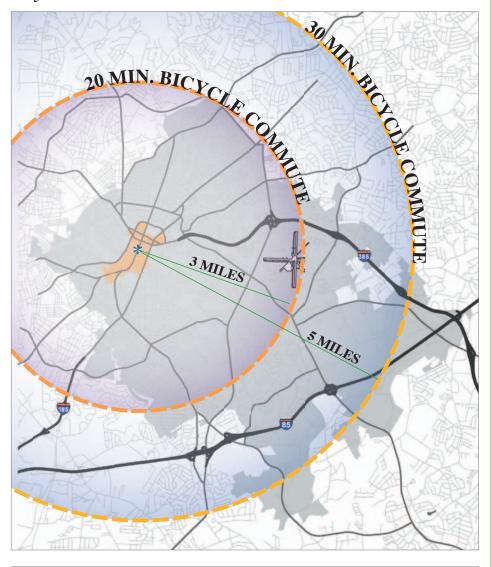
The sprawling nature of many land development patterns often leaves residents and visitors with no choice but to drive, even for short trips. In fact, two-thirds of all trips we make are for a distance of five miles or less. Surveys by the Federal Highway Administration show that Americans are willing to walk as far as two miles to a destination and bicycle as far as five miles. A complete trail network, as part of Greenville's local transportation system, will offer effective transportation alternatives by connecting homes, workplaces, schools, parks, downtown, and cultural attractions.

In the City of Greenville, the trail network will provide alternative transportation links that are currently unavailable. Residents who live in subdivisions outside of downtown will be able to walk or bike downtown for work, or simply for recreation. Residents will be able to circulate through the city in a safe, efficient, and fun way: walking or biking. Residents will be able to move freely along trail corridors without paying increasingly high gas prices and sitting in evergrowing automobile traffic. Last but not least, regional connectivity through alternative transportation could be achieved once the trail network is seamlessly connected to destinations in Greenville County and the region as a whole. (See 1-6 for approximate commute times to downtown Greenville)

Improving Health through Active Living

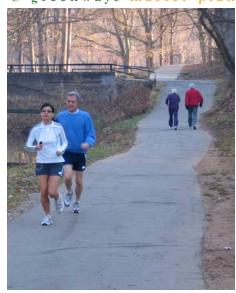
Greenville's trail network will contribute to the overall health of residents by offering people attractive, safe, accessible places to bike, walk, hike, jog, skate, and possibly places to enjoy water-based trails. In short, the trails network will create better opportunities for active lifestyles.

Bicycle Commute Time to Downtown Greenville



Average approximate commute time to Downtown Greenville from 3 and 5 miles out (According to the League of American Bicyclists, the average bicycle riding speed is 10 mph). Depending on the directness of the route, actual travel time may be longer.





Greenville trail-users, staying active in Cleveland Park.

The design of our communities—including towns, subdivisions, transportation systems, parks, trails and other public recreational facilities—affects people's ability to reach the recommended 30 minutes each day of moderately intense physical activity (60 minutes for youth). According to the Centers for Disease Control and Prevention (CDC), "Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic"(9).

In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week (10). This is significant considering that for people who are inactive, even small increases in physical

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activity can bring measurable health benefits (11). Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community.

Many public agencies are teaming up with foundations, universities, and private companies to launch a new kind of health campaign that focuses on improving people's options instead of reforming their behavior. A 2005 Newsweek Magazine feature, Designing Heart-Healthy Communities, cites the goals of such programs (italics added): "The goals range from updating restaurant menus to restoring mass transit, but the most visible efforts focus on making the built environment more conducive to walking and cycling." (12) Clearly, the connection between health and trails is becoming common knowledge. The Rails-to-Trails Conservancy puts it simply: "Individuals must choose to exercise, but communities can make that choice easier."

Clear Skies, Clean Rivers, and Protected Wildlife

There are a multitude of environmental benefits from trails, greenways, and open spaces that help to protect the essential functions performed by natural ecosystems. Greenways protect and link fragmented habitat and provide opportunities for protecting plant and animal species. Trails and greenways reduce air pollution by two significant means: first, they provide enjoyable and safe alternatives to the automobile, which reduces the burning of fossil fuels; second, they protect large areas of plants that create oxygen and filter air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metal. Greenways improve water quality by creating a natural buffer zone that protects streams, rivers and lakes,

trails & greenways master plan

preventing soil erosion and filtering pollution caused by agricultural and road runoff.

As an educational tool, trail signage can be designed to inform trailusers about water quality issues particular to each main corridor (along the Reedy River, Richland Creek, Laurel Creek, and Brushy Creek) and their surrounding land uses. Such signs could also include tips on how to improve water quality. Similarly, a greenway can serve as a hands-on environmental classroom for people of all ages to experience natural landscapes, furthering environmental awareness.



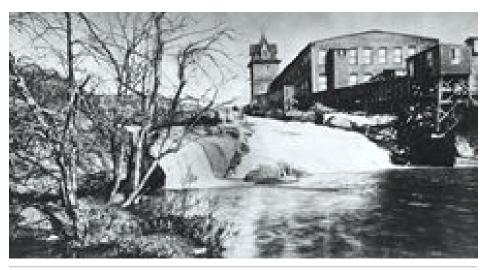
Trail signage can be designed to further awareness around issues of health and the environment, such as these signs at Linky Stone Park.

Protecting People and Property from Flood Damage

The protection of open spaces associated with trail and greenway development often also protects natural floodplains along rivers and streams. According to the Federal Emergency Management Agency (FEMA), the implementation of floodplain ordinances is estimated to prevent \$1.1 billion in flood damages annually. By restoring developed floodplains to their natural state and by limiting development within the floodplain, many riverside communities are preventing potential flood damages and related costs (13). This aspect of greenway development is particularly relevant to the City of Greenville and Greenville County, as indicated by recent local newspaper headlines: "Residents seek solutions to devastating floods" (The Greenville News, February 11, 2007). The article reported that, "As part of an unusual county effort to buy some flood-marred homes from residents and cut off water-logged roads, the county and state plan to jointly add new cul-de-sacs and eliminate a bridge in the Lake Fairfield area." Such actions are in response to devastating floods near Pleasantburg Drive and East North Street. Protecting flood prone corridors as greenways could have prevented this extra cost to taxpayers.

Enhancing Cultural Awareness and Community Identity

Greenways can serve as connections to our heritage by preserving historic places and by providing access to them. They provide a sense of place and an understanding of past events by drawing the public to historic and cultural sites. Trails often provide access to historic features such as battlegrounds, bridges, buildings, and canals that otherwise would be difficult to access or interpret. For example, in the late 1960s, the South Carolina Department of Parks, Recreation &



A historic view of Reedy Falls from the Greenville County Historical Society website.

Tourism (SCPRT) partnered with the South Carolina Department of Archives and History on a program to develop a series of historic trail routes across the state (auto routes connecting a series of historic points of interest). Although the program is no longer in existence, the research and information collected is still of use to trail advocates researching the history of trail or greenway corridors throughout South Carolina.

Furthermore, Greenville has its own unique history, and its own historic features and destinations. The Greenville County Historical Society sponsors programs, publications, and exhibitions pertaining to the history and culture of the region, and therefore could be of great assistance when naming trails and designing trail features in a historical and cultural context. By recognizing, honoring, and connecting these features through the trail network, the combined result could serve as a major asset to the region.

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1.4 Vision and Goals

The vision for the City of Greenville's future trail network is derived from local residents and city staff. Input was gathered via meetings, workshops, written comment forms, and an online opinion form. A fundamental part of that vision is that the trail network will contribute to the overall quality of life throughout the City of Greenville. Given the benefits of trails and greenways outlined in the previous section, specific visions and goals of the Trails and Greenways Master Plan for Greenville include the following:

- Develop a safe and interconnected city-wide network of trail facilities that link together destinations and people, both locally and regionally.
- Improve the quality of life in Greenville, by developing a trail network that provides facilities and programs designed to expand and encourage active recreation, community strength, and alternative transportation.
- Enhance, protect, and preserve the environmental quality of open space, waterways and wildlife habitats.
- Stimulate economic growth through increases in tourism and real property value, by developing a city-wide trail network.
- Conserve and tell the story of local culture, history, and heritage through interpretive trails and signage.

Chapter 1 Footnotes

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